Owner's Manual

BONAIRE®

Durango Window Cooler

With Ionizer

Model WEAC628i

Please keep this important manual in a safe place. It is the owner's responsibility to ensure that regular maintenance is carried out on this evaporative cooling product. Failure to do so will void all guarantees beyond statutory and legal requirements.

Introduction

GENERAL INFORMATION.

Thank you for purchasing a quality Bonaire Evaporative Cooler. We care about your safety and would ask you to spend a few minutes reading these simple instructions before installing or operating this product.

Safety !

Read carefully all of these instructions prior to installing and operating the unit.

- **Read and Save these Instructions. Do not throw these Instructions away**.
- Installation of this cooler in any manner not prescribed by these instructions could cause a safety issue and WILL void any warranty.
- Use only with a 110V 60Hz single phase grounded outlet.
- Unplug the cooler and position the rotary control knob to the OFF position when installing, servicing or cleaning.
- Do not operate cooler with Rear filter panel removed.
- Do not operate cooler with a damaged cord, plug or other component.
- Do not run the power cord under carpet or other floor covering.
- Do not use the power cord with an adaptor plug that converts the 3 pin plug into a 2 prong connector.
- Do not use the cooler with an improperly grounded outlet...
- Do not alter or modify this cooler.
- Do not allow children to install, operate or service this cooler.
- **WARNING:** To reduce the risk of fire or electric shock, do not use this product with any solid state speed control device.
- Use only qualified electricians for replacement or servicing of switches, or electrical motors and components in this cooler.
- This Window Mounted Cooler is suitable for installation in windows (either Sash hung or sliding) with a minimum opening width of 650mm (26”) and Height of 550mm (22”), please ensure that the directions for correct mounting are adhered to for the SAFE operation of this Cooler.

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Operation Instructions

GENERAL

Introduction

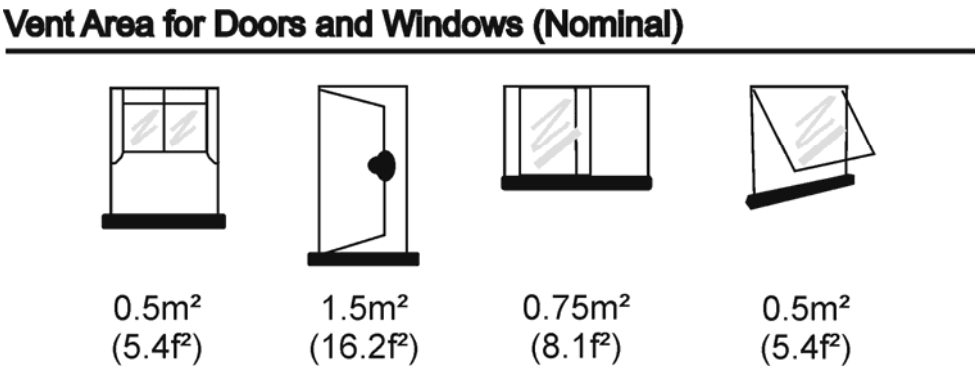
Your evaporative air conditioner is engineered to meet the rigors of harsh environments. Used and maintained in accordance with this manual, it will provide you with years of quiet, cool and environmentally friendly operation. Please take the time to read this manual.

The principal of your unit is to introduce fresh air, which is washed through the filter pads to provided cool fresh air. The warm stale air within the room is forced out by the cool air through open doors or windows.

Unit Operation

It is essential for successful operation of the evaporative cooler that there be sufficient free air openings in the room to be cooled – approximately 0.5m² (5.4² feet). Open doors and windows will usually provide this as per the diagrams below.

Please Note:- It is important for good ventilation that doors or windows are not open on the windward side of the house.



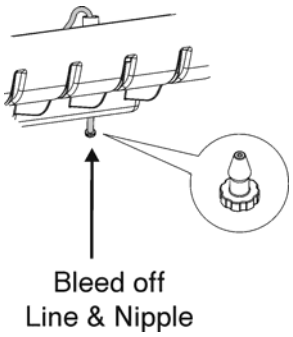
Operation Instructions

Bleed Off

The bleed off rate is factory preset and is not adjustable without direction of the manufacturer. It is critical to the life of the product that the bleed off function is not restricted in way as this may void unit warranty and will cause damage to your filters and cooler.

The function of the bleed off must be inspected by the owner on a regular basis to ensure the bleed off continuously flows when the unit is operating in "COOL" mode.

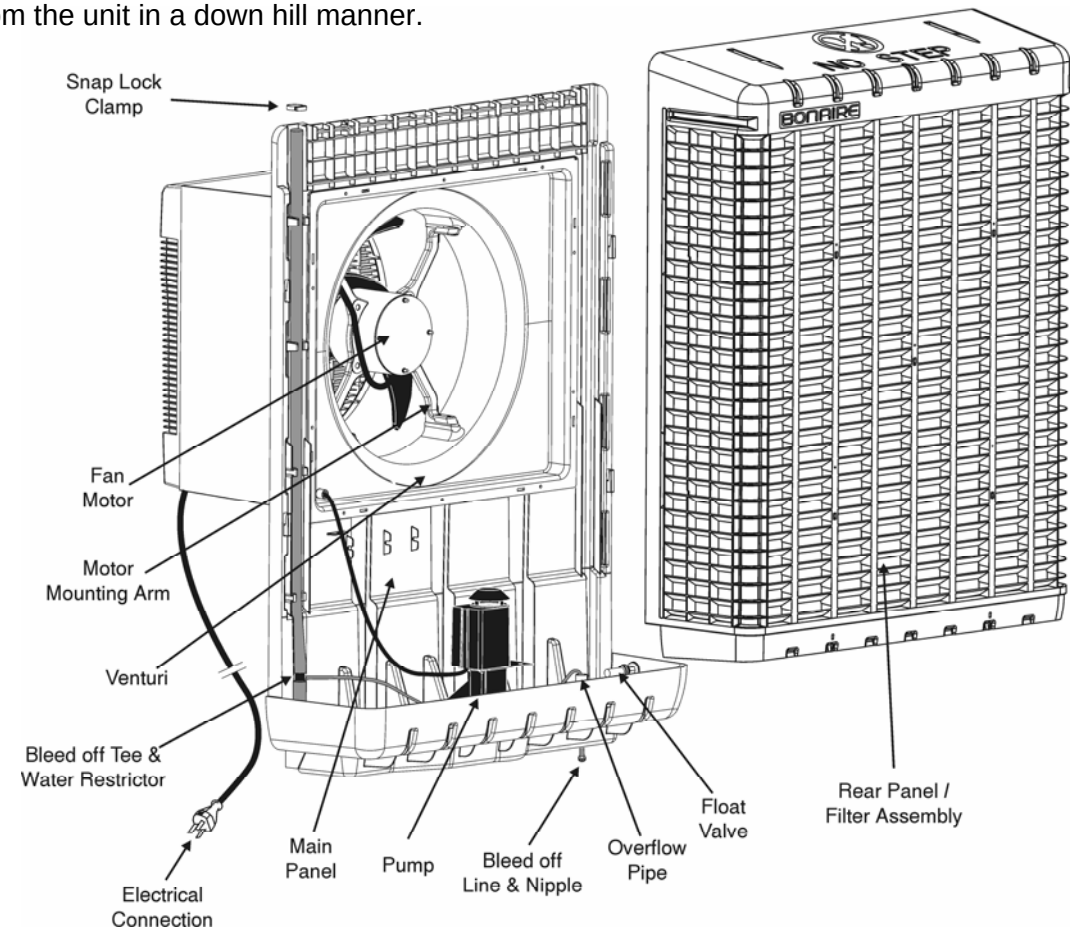
All evaporative coolers require water bleed-off to prevent build-up of mineral deposits as the result of the evaporative cooling process. This will maximize the life of the premium CELdek® filter pads and minimize mineral deposits inside the cooler. The bleed-off function only operates in COOL mode (when the water pump operates).



Should water supply contain high levels of total dissolved solids (greater than 300 p.p.m.), increase the bleed rate. See page 13.

This bleed water can be used in gardens or diverted to drains using standard garden hose and fittings from your local hardware store. The overflow pipe connection is a ¾" x 14TPI ANS straight pipe thread.

Please Note:- Any additional pipe work fitted to the bleed off by the owner must slope away from the unit in a down hill manner.



Operation Instructions

COOLER OPERATION

Before Starting

- Always ensure that there is another open window or door through which the air can exhaust to other parts of the house. Refer page 4 correct operation and ventilation.
- Ensure that the filters are kept clean.
- Ensure that the water to the cooler is turned on.
- Ensure the plug is connected to a110V 60Hz single phase grounded appliance socket on the inside of the house and turned on.
- **IMPORTANT. After the first 10 hours of operation in COOL mode, the water must be drained from the unit water tank to remove any new product residuals. This process must be repeated after a further 10 hours of COOL mode operation. (See page 12 for removing the over flow pipe.)**

Operating the unit

The Durango cooler can be operated in either of 2 modes, COOL or FAN.

- COOL Mode.

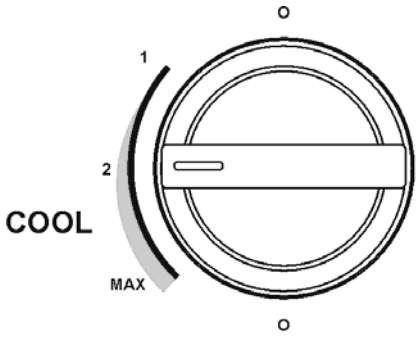
  Move control knob to “COOL” side. Select desired fan speed

  1 - Sleep Mode

  2 - Normal Operation

  Max - Quick Cool down

  The unit will now operate with the fan motor, water pump and ionizer activated.



- FAN Mode

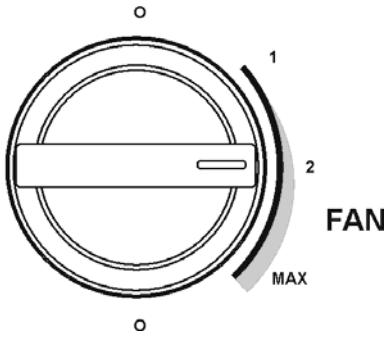
  Move the control knob to the “FAN” side (pump isolated). Select desired fan speed

  1 - Sleep Mode

  2 - Normal Operation

  Max - Quick Cool down

  The unit will now operate with the fan motor only activated.



- To turn the unit off, rotate the control knob to the **O** position

Installation

INSTALLATION REQUIREMENTS

Tools

- Drill (Power or Cordless)
- Adjustable Wrench.
- Phillips Head Screw Driver
- Drills for drilling pilot holes into window frame 1/8" (3.2mm) Drill - or appropriate for size of screw used.
- ¾" Philips Head Screws for affixing Window Infill Panel

Materials Required (Not supplied)

- Silicone for sealing Window Infill Panel
- Length of 6mm (¼") copper or plastic tubing
- 840mm (33") of suitable spacer material (if required)
- Sillcock Valve

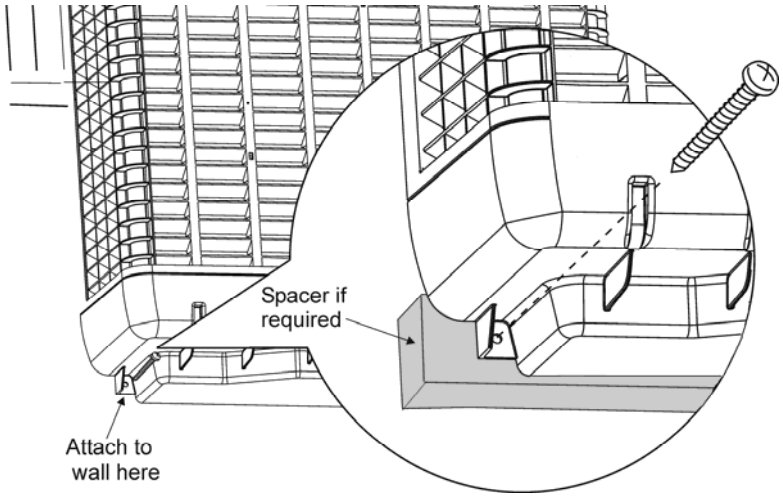
INSTALLATION

Note that it is not necessary to remove the Rear filter panel from the unit for installation.

Do not connect the power to the cooler until the installation is complete.

External Fixing Of the Unit

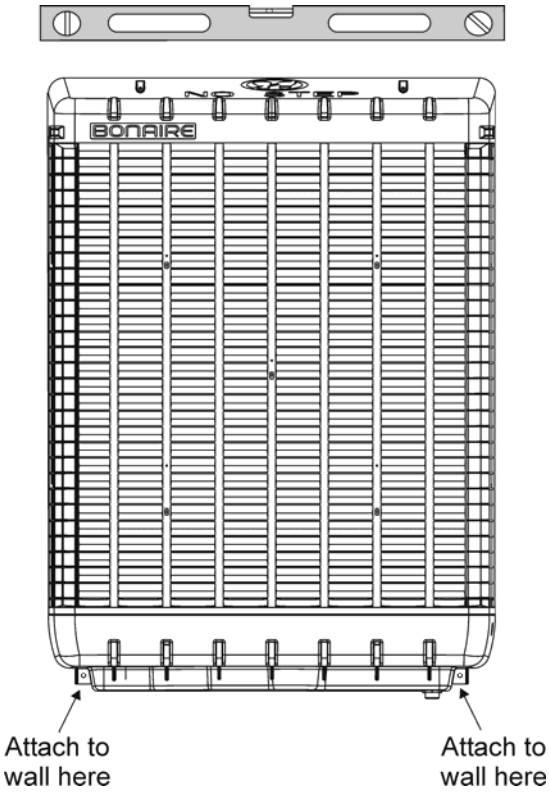
- Ensure that the location chosen to mount the cooler is strong enough to support the operating weight of the unit. The unit's nominal operating weight is 42 kg (93 lbs).
- Ensure that the window opening is large enough for the neck of the cooler (nominally 550mm (22") high by 650mm (26") wide).
- Ensure there is a minimum 100mm (4") clearance above the external cabinet for maintenance purposes.
- Position the cooler through the window (two or more people will be required for this) so that the unit is hard up against the outside wall of the house.

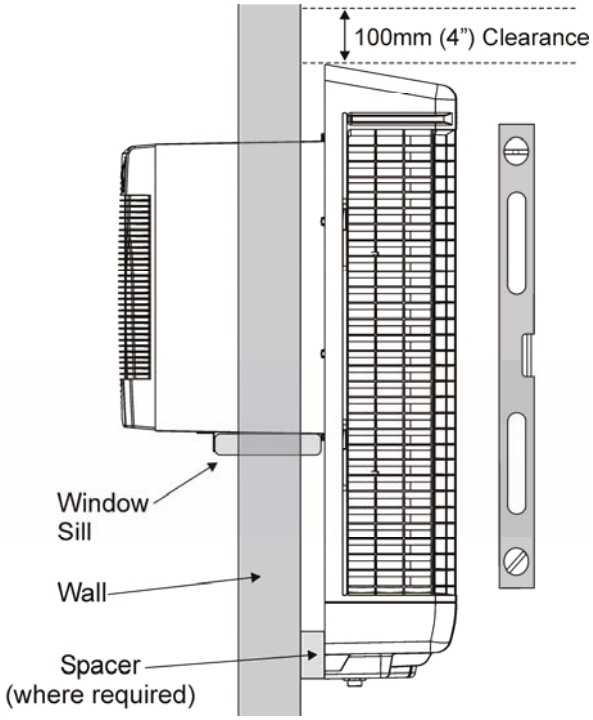


Note that if the cooler does not fit hard up against the outside wall (e.g. a protruding timber or brick window sill), utilise a spacer block of wood (not provided) which must be attached to the wall (the unit is then fixed to this wood).

Installation

- Ensure that the unit is installed level in the vertical and horizontal positions as illustrated, prior to fixing the cooler.





- Use the two 'Wallmate' screws provided to fix the cooler to the outside of the house if a 'stucco-type' wall is being used. (Note that if the unit is not hard up against the wall, these fixing screws will go into the spacer block all ready installed).
- For solid walls, brick or masonry, use suitable masonry lag anchors.
- Place the unit in position, mark screw positions, remove unit then drill pilot holes for timber walls (1/8" or 3.2mm).
- Replace unit in window, fit screws.

Installation

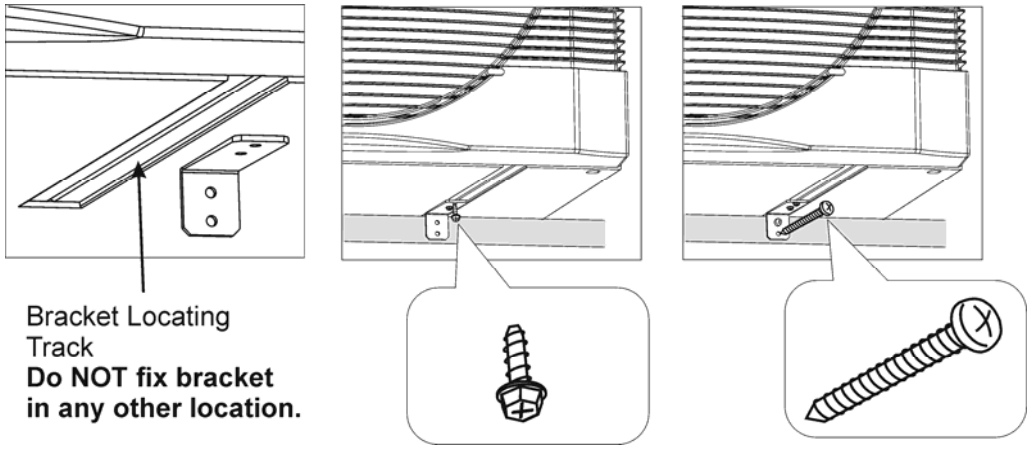
Internal Fixing of the Unit

- **IT IS MANDATORY THAT THE METAL FIXING BRACKETS SUPPLIED ARE FITTED TO ENSURE A SECURE INSTALLATION.**

  Utilise the 2 fixing brackets and 4 screws provided as shown in the diagram to ensure the unit is adequately locked into position.

- Ensure that the bracket is aligned within the indicated mounting track area on the underside of the fan housing – see diagram below. Drill 2x1/8" (3.2mm) holes and insert screws into unit as per diagram and repeat for window frame with appropriate screws.

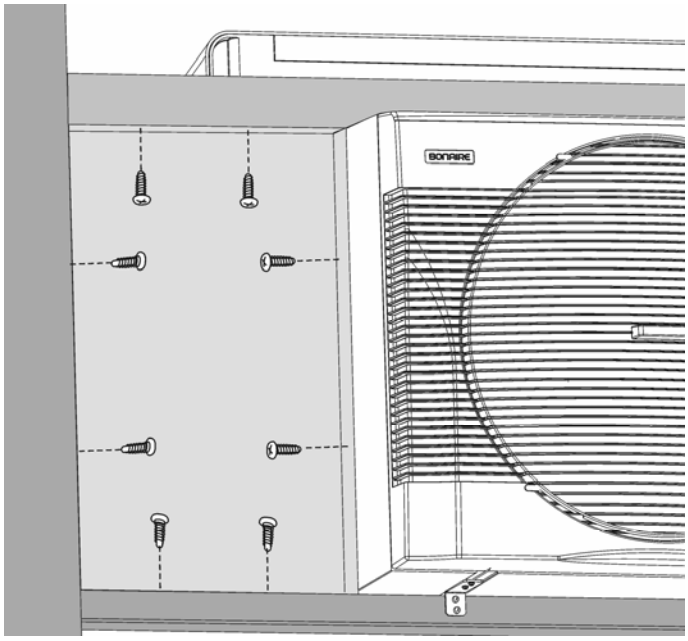
- Ensure that the cooler is now fixed rigidly to the house structure



- Close window against unit. Measure the gap of the opening & cut the in-fill panel to fit in the gap left.

- Fit in fill panel with screws (length of screws must not exceed 25mm (1") in length) and seal any gaps with silicone.

- Check that the unit is still level using spirit level on top edge of Rear filter panel.



Installation

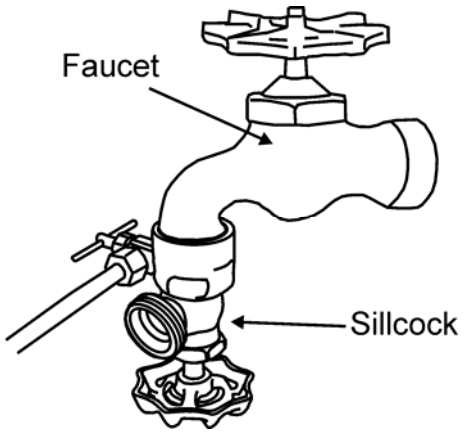
Water Connection

Install a sillcock and water valve (not supplied) to the faucet closest to the cooler and attach water supply line between cooler and water valve.

The overflow is factory fitted. The bleed hose protruding through the overflow fitting SHOULD bleed water during normal operation at a rate between 6 – 12 Litres per hour (1.5 – 3 gallons per hour). This is normal and is designed to preserve the quality of the Cooler and Cooling efficiency of the Unit. If required this Bleed water can be plumbed away using standard 'over-the-counter' garden hose and fittings.

The float valve is factory set and should require no further adjustment at time of installation (see page 12 if adjustment is required).

Your cooler is now ready for commissioning.



Commissioning

- Check that another door or window in the room is open to allow air to exhaust to other parts of the house.
- Turn the water supply to the cooler on.
- Plug the cooler into a 110V 60Hz single phase grounded appliance socket on the inside of the house and switch the socket on.
- Turn the unit on to FAN mode and check the operation of the three speed fan.
- Rotate the control knob to COOL mode and operate the three speed fan and pump.
- Leaving the unit in the COOL mode, check that a constant small stream of bleed off water is coming from the overflow tube. This bleed off is designed to reduce mineral build up on the CELdek® filter pads.
- You may notice a wet paper smell as the water circulates around the filter pads. This is normal during the commissioning phase and at the beginning of each season when the unit is operated after the winter break. It will only last for a short time.

Maintenance

Before commencing any maintenance work on your unit, ensure it is disconnected from the power supply.

Note: It is essential that your evaporative air conditioner is maintained in accordance with this manual. Failure to do so will affect the life of the product and reduce the level of efficiency.

THIS MANUAL CONTAINS A 5 YEAR MAINTENANCE PLANNER TO USE IN CONJUNCTION WITH THESE INSTRUCTIONS. See page 14.

STEP 1

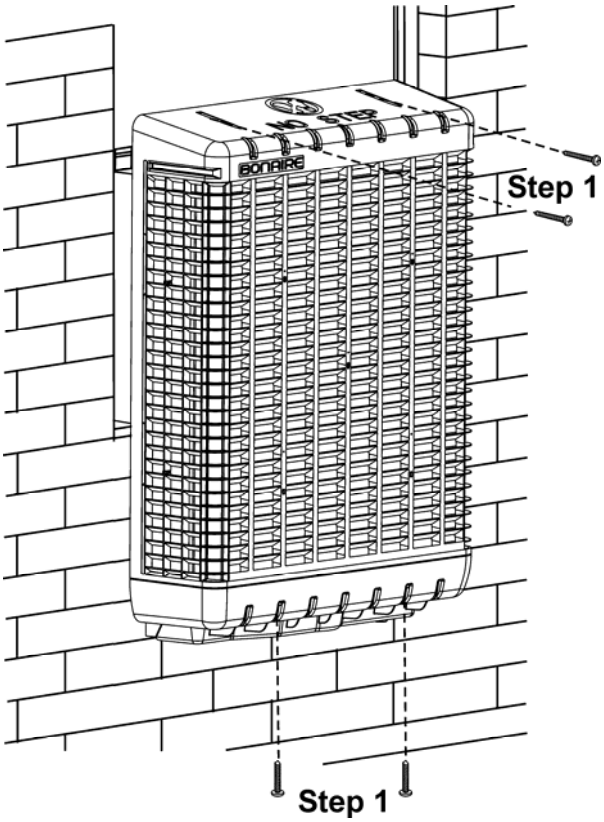
Remove Rear filter panel fixing screws (4 off).

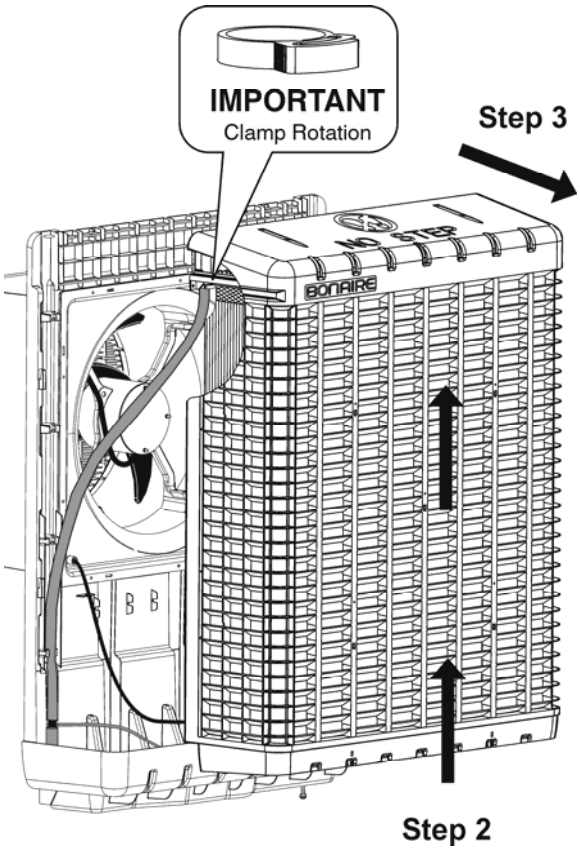
STEP 2

Lift the Rear filter panel in a vertical fashion 3" or 75mm.

STEP 3

Pull rear filter panel away from unit.





Step 4 (Optional)

The pump hose will be attached to rear filter panel. Should the hose come off during removal of rear filter panel or be removed for servicing the filters, care should be taken to re-attach the hose and snap lock clamp before replacing rear filter panel.

IMPORTANT: The rotation of the snap lock clamp must be correct (see diagram above) to refit the rear filter panel assembly.

Maintenance

GENERAL

Filter Pads

Visually check CELdek® pads for damage or blockage. Gently hose down pads from both sides to remove any build up of salts, dust and pollen. In dusty areas more regular cleaning is recommended. Check the water distributor, making sure it is clear and free from blockage. Failure to do so may lead to uneven water distribution and therefore less efficient operation.

Water Tank

It is important to keep the water tank clean and free from sediment and algae growth. Using a small soft bristle brush, brush all surfaces in the tank while it is full of water (DO NOT FORGET THE PUMP STRAINER). Turn off the water inlet to the unit (an isolation valve should be fitted to the water inlet before the float valve or at the water supply faucet). Drain the tank by undoing the external overflow fitting lock nut and removing the overflow fitting. After refilling the It may be necessary to repeat this procedure if the tank is very dirty.

Water Distributor

Check the water distribution system for blockage. Check the delivery tube for kinks or holes.

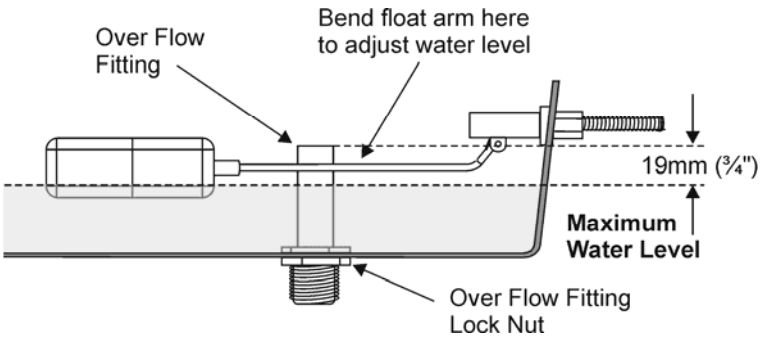
Note: Water supply line to float valve must be flushed before connecting.

Water Level / Float Valve

The water level should be set at nominal 19mm (¾") below height of stand pipe lip. The float valve is a mechanical type and is factory set. If it requires adjustment keep bends tight. If the valve is leaking, it may require replacement.

Note: Water supply line to float valve must be flushed before connecting.

Note: Some discharge from the overflow may be experienced after shut down due to water draining back from the CELdek® filter pads. This is normal.



Motor and Fan

Check that the fan spins freely and that there is no build up on the blades. Check the motor for corrosion and spray with an anti corrosive agent if necessary.

Maintenance

Bleed Off

The bleed off should be checked to ensure it runs continuously and that there is no build up of mineral deposits in or on your air conditioner. White deposits indicate high mineral content and the bleed off system should be checked. Should the bleed nozzle become blocked, use a fine pin or similar to clear.

If the bleed is running as per normal, the bleed nozzle is clean and the deposits are still forming, then more bleed may be required.

In areas of poor water quality (where total dissolved solids are greater than 300 p.p.m.) increase the diameter of the bleed nipple using a 1.6mm ($\frac{1}{16}$") drill bit.

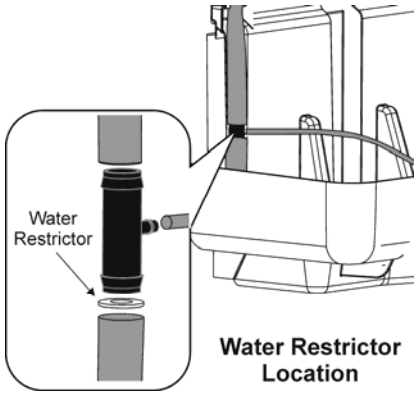
Pump Operation

Check the pump spins freely and that the strainer is clean. Ensure the rubber water slinger is in place on the stainless steel shaft under the motor.

After a long idle period, the pump may stop rotating due to a mineral build up on the stainless shaft adjacent to the motor. To free the pump shaft, remove mineral build up and rotate the shaft using fingers or suitable sized pliers. See diagram.

Spraying the area with suitable water displacement lubricate may assist.

In areas of low voltage, the pump may not provide enough water to wet the filters. To rectify, remove the water restrictor from the pump supply hose adjacent to the bleed off tee piece. See diagram.

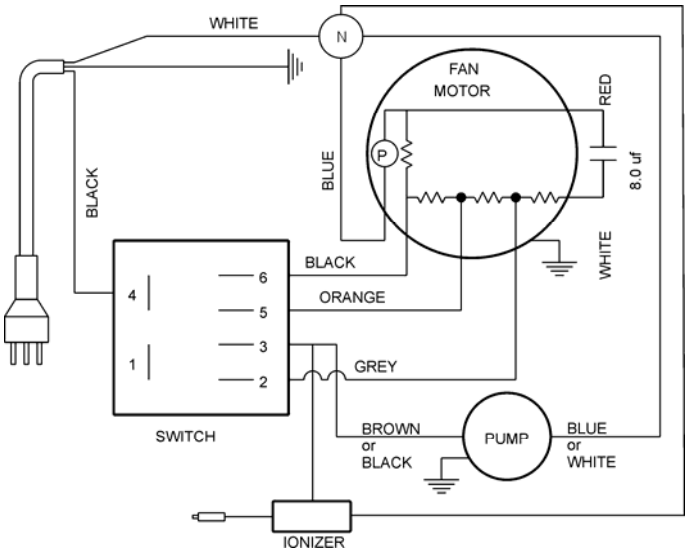


Water Restrictor Location

ELECTRICAL

No general maintenance is required to the electrical system.

Electrical connections and maintenance should only be carried out by a qualified electrician.



Maintenance

5 Year Maintenance Planner

			1st Year	2nd Year	3rd Year	4th Year	5th Year
PRESEASON CHECK	1.1	Check quality of filters					
	1.2	Check fan & pump					
	1.3	Fill unit with water					
	1.4	Start unit					
	1.5	Check bleed-off system					
FIRST MIDSEASON SERVICE	2.1	Check and clean filters					
	2.2	Drain, clean and refill water tray					
	2.3	Check bleed-off system					
	2.4	Check strainers and filters					
	2.5.	Check unit operates correctly					
SECOND MIDSEASON SERVICE	3.1	Check and clean filters					
	3.2	Drain, clean and refill water tray					
	3.3	Check bleed-off system					
	3.4	Check strainers and filters					
	3.5	Check unit operates correctly					
END OF SEASON SERVICE AND SHUT DOWN	4.1	Turn off water supply					
	4.2	Drain and clean unit					
	4.3	Leave drain plug removed					
	4.4	Check motor and pump and spray with a water displacement lubricant.					

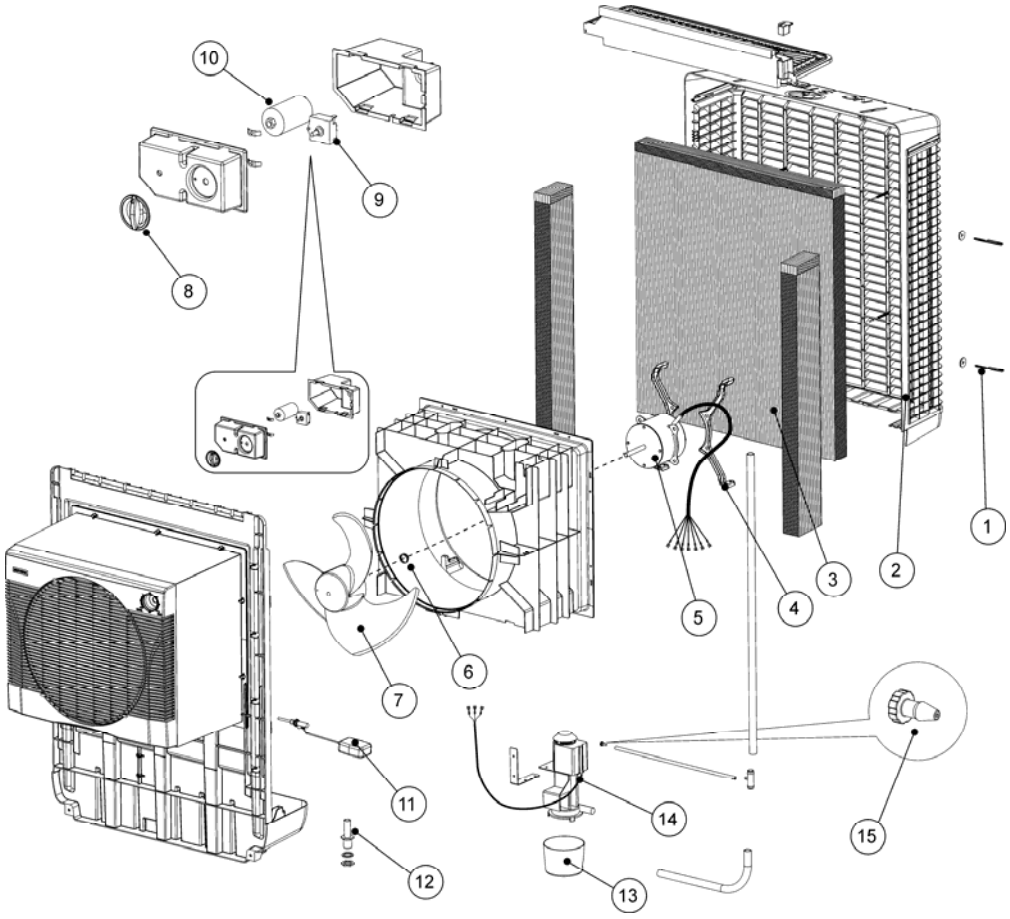
Customer care Line

1 888 812 3496

Parts Line

800 895 0029

Parts List



No	Description	Part Number
1	Filter Retainer Clips	6280134SP
2	Rear Filter Panel Assembly	6280103SP
3	Filter Pad Set	6280116SP
4	Motor Mounting Brackets	6282006SP
5	Motor	6281601SP
6	Fan Retaining Clip	6280804SP
7	Fan	6280806SP
8	Control Knob	6280133SP
9	Switch	6201609SP
10	Capacitor 8.0 mf	9041888SP
11	Float Valve Assembly	6280901SP
12	Overflow Fitting	6280912SP
13	Pump Filter Basket	6050811SP
14	Pump	6280801SP
15	Bleed Nipple	6280803SP

Problem Solving

PROBLEM	PROBABLE CAUSE	REMEDY
Unit fails to start	a Power Failure	a Wait for power to be turned on.
	b Tripped Circuit Breaker	b Reset circuit breaker
	c Blown Fuse	c Replace
	d Electrical Fault	d Call Bonaire Care Line
Filter Pads not wetting.	a Pump Seized	a Refer to Maintenance page. See Pump section.
	b Electrical fault with pump	b Call Bonaire Care Line
	c Low voltage in your area	c Remove water restrictor at bleed tee. See page 13.
Water leaking from overflow	a Float Valve Leaking	a Check adjustment or replace float valve if necessary
	b Drain from CELdek® Pads	b Normal Operation – adjust float level
Water Droplets in air stream	a Loose Delivery Tube	a Check and tighten
	b Break in tubing	b Replace as necessary
	c Pump appears to deliver excessive water to pads	c Check the condition of the filter pad. Wash if pad shows heavy build up of minerals
	d Bleed nozzle is blocked	d Clean bleed nozzle
Excessive humidity	a Not enough air flow	a Increase fan speed
	b Inadequate Exhaust	b Provide more open area to exhaust stale air by opening windows and doors in adjacent rooms.
Inadequate Cooling	a Dirty Filters	a Clean
	b Dry Filters	b Check control set on COOL mode. Check water delivery system. Adjust if necessary.
Unpleasant Odour	a Unit located near odour source	a Remove source
	b Algae in water tank	b Clean tank and refill with fresh water.
Rapid formation of white deposits on pads	High Mineral Content	Bleed off should be checked to see if bleed nozzle is blocked, clear if necessary and clean CELdek® pad. Increase the bleed rate – see page 13. More regular maintenance may be required.

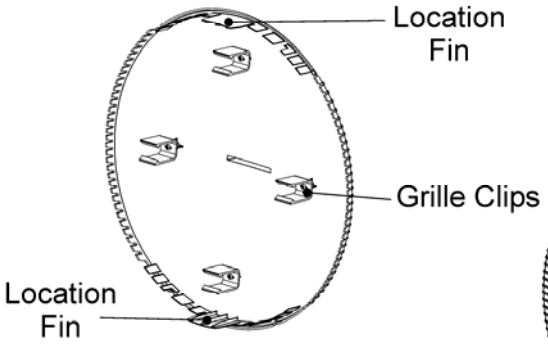
ANY FURTHER PROBLEMS PLEASE CONTACT YOUR

TOLL FREE BONAIRE CUSTOMER CARE LINE ON 1 888 812 3496

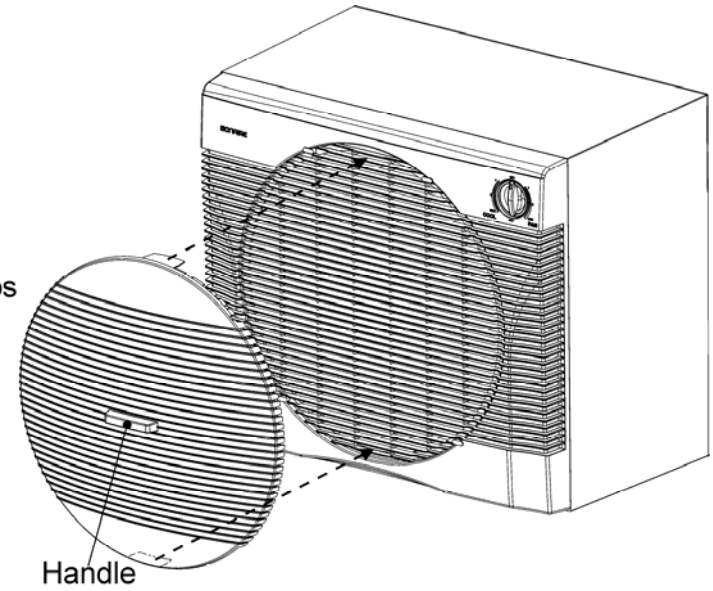
and for parts call 800 895 0029

Optional Extras

Optional Winter Cover Instructions



Winter Cover Inside View



Fitting the Winter Cover

The optional winter cover has been design to provide you with a simple method to seal the unit from winter draughts.

To **INSTALL** the optional winter cover:

1. Check the lines on the winter cover match the front grille for correct application.
2. Place the lower fin of the winter cover into the gap between the first and second grilles at the bottom of the fan grille.
3. Ensure the grille clips line up with the appropriate grille and push on.

To **REMOVE** the optional winter cover:

1. Simply pull the cover off using the winter cover handle.
2. Store the winter cover for the next winter.

To purchase the optional winter cover call:

800 895 0029

Warranty

Statement on Product Warranty (U.S.A.)

1. Warranty

Subject to the Conditions and Exclusions, Climate Technologies Pty Ltd provides the original purchaser with the following warranty:

Climate Technologies Pty Ltd warrants this appliance for a 12 month period from the date of purchase. During this period, a defective appliance or defective parts will be repaired or replaced free of charge at the election of Climate Technologies Pty Ltd.

2. Conditions and Exclusions

(a) The warranty only covers window coolers manufactured by Climate Technologies Pty Ltd and purchased in the U.S.A.

(b) The warranty does not cover installation components that may be attached to the product manufactured by Climate Technologies Pty Ltd. These may include and is not limited to items such as ducting, flues, grills, piping, etc. These items remain solely the responsibility of the installer / owner.

(c) This warranty is only valid if the appliance is installed and operated in accordance with the manufacturer's instructions and for its designed and intended purpose at the nominated phase, voltage and frequency.

(d) Product fitness for purpose and overall system design / sizing are solely the responsibility of the installer / owner. This includes but is not limited to heat load calculations, air flow, system balancing, humidity, water quality, etc.

(e) Industrial or commercial use of this product will void the warranty. The appliance is designed for domestic use only.

(f) The product must be installed by a qualified person in the manner prescribed by local and statutory regulations and to the manufacturer's specifications.

(g) Warranty will only be given where proof of purchase is provided by the original purchaser and Climate Technologies Pty Ltd is satisfied that the appliance is within the warranty period.

(h) Warranty will not be provided where, in Climate Technologies Pty Ltd opinion:

  (i) There is nothing wrong with the appliance.

  (ii) The defective operation of the appliance is due to failure of electricity or water supply.

  (iii) Defects are caused by neglect, incorrect application, abuse or by accidental damage of the appliance.

  (iv) An unauthorised person has attempted to repair the appliance.

  (v) The appliance has been changed or modified in any way.

  (vi) A situation arises referenced in the trouble-shooting guide.

(i) Damage caused by elements such as wind, rain, lighting, floods, etc along with power spiking and brownouts are not considered defective material or workmanship and as such are not covered by our warranty.

(j) If there is no certificate of compliance for plumbing or electrical work, Climate Technologies Pty Ltd reserves the right to refuse warranty on non-compliant installations.

Warranty

(k) No responsibility will be accepted for outside elements such as pests, animals, pets and vermin that may cause damage to the unit.

(l) Harsh environmental situations such as salt air that may cause damage are not covered.

(m) Responsibility or liability is not accepted for damage to contents, carpet, walls, ceilings, foundations or any other consequential loss or damage of whatever nature either direct or indirect resulting from installation, operation or misuse of the appliance.

(n) Parts replaced under warranty are warranted for the balance of the original Warranty Period.

(o) All warranties are non-transferable.

(p) The benefits conferred by this warranty are in addition to warranties and other rights in respect of the appliance, which the consumer has under State and Federal laws. This warranty must be read subject to that legislation and nothing in this warranty has the effect of excluding, restricting or modifying those rights.

3. Climate Technologies Pty Ltd

Climate Technologies Pty Ltd is a company incorporated in Australia (A.C.N. number 001 418 042). Reference to Climate Technologies Pty Ltd includes its authorised distributors.

Warranty for Replacement Parts.

Parts replace under warranty are warranted for the balance of the Window Cooler's original warranty period.

Proof of Purchase

Please attach your proof of purchase here. Your receipt is your warranty and will be required to validate any warranty.

Dealer / Product Information

Dealer/Retailer:	
Address:	
Phone Number:	
Unit Model Number:	
Serial No:	

"Excelling today for a better tomorrow"

Manufactured by
Climate Technologies Pty Ltd
ABN 13 001 418 042

26 Nylex Avenue
Salisbury, SA 5108

AUSTRALIA

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